

CLAIMS

1. A stereoscopic viewing system comprising a raw image of a subject, which raw image comprises an array of substantially vertical raw image strips wherein alternating strips are respectively strips taken from source images, being a right eye view image and a left eye view image of the subject, an array of substantially vertical lens strips interposed between the raw image and a focal plane spaced from the raw image, wherein the respective lens strips are positioned to receive light from the raw image strips and refract that received light to cause a stereoscopic image of the subject to be resolved on the focal plane, and masking means comprising a substantially planar array of vertical opaque strips interposed between the raw image and the said focal plane.
2. A stereoscopic viewing system according to claim 1 wherein, in forming the array of raw image strips, the right eye source image and the left eye source image are both divided into adjacent vertical strips, and those strips taken for the raw image strips comprise every alternate one of said respective source image strips so that every other one of the source image strips is omitted from the raw image.
3. A stereoscopic viewing system according to claim 1 or claim 2 wherein, for a monochrome image, the vertical opaque strips are of substantially the same width as that of said raw image strips and have their centre lines respectively in register with alternate lines of junction between raw image strips, and the vertical lens strips are also of substantially the same width and have their centre lines respectively in register with other alternate lines of junction between raw image strips.
4. A stereoscopic viewing system according to claim 1 or claim 2 wherein, for a colour image, the raw image strips each contain a trio of columns of respectively R G and B pixels, that the lens strips are as wide as the trio and the opaque strips are of the same width as the individual R G and B pixel columns and are disposed between the lens strips.
5. A stereoscopic viewing system according to any one of claims 1 to 3 wherein the masking means is in contact with the raw image.
6. A stereoscopic viewing system according to any one of claims 1 to 4 wherein the opaque strip array is substantially co-planar with the lens strip array.
7. A stereoscopic viewing system according to any one of claims 1 to 6 wherein the array of lens strips comprises a lenticular lens system in which each lens is of a tri-elliptical cross-section.



